

VERBENA PHLOGIFLORA f. ALBA Moldenke, f. nov.

Haec forma a forma typica speciei corollis albis recedit.

This form differs from the typical form of the species in having white corollas.

The type of the form was collected by Raulino Reitz (no.

3443) on the campo at Cambajuba, São Joaquim, alt. 1200 m., Santa Catharina, Brazil, between January 23 and 29, 1950, and is deposited in the Britton Herbarium at the New York Botanical Garden.

VITEX PINNATA f. ANOMALA Moldenke, f. nov.

Haec forma a forma typica speciei recedit foliis plerumque 1-foliolatis, saepe 2-foliolatis.

This form differs from the typical form of the species in having the leaves mostly 1-foliolate, sometimes 2-foliolate, even when mature.

The type of the form was collected by H. A. B. Binnemeijer (no. 1362) on Muntok, Banka, on October 10, 1917, and is sheet no. 25007 in the Herbarium Bogoriense at Buitenzorg.

THE KNOWN GEOGRAPHIC DISTRIBUTION OF THE MEMBERS OF THE
VERBENACEAE, AVICENNIACEAE, STILBACEAE, SYMPHOREMACEAE, AND
ERIOCAULACEAE. SUPPLEMENT 6

Harold N. Moldenke

Since the publication of my booklet entitled "The known geographic distribution of the members of the Verbenaceae, Avicenniaceae, Stilbaceae, Symporemaceae, and Eriocaulaceae" in 1949 (1) much new information on this subject has come to light and has been published by me in periodic supplements (2). Since the publication of the last of these supplements almost 8000 additional specimens of these groups have been examined by me from the herbaria of the Jardin Botanique de l'Etat at Brussels, the Naturhistoriska Riksmuseum at Stockholm, the Estacion Experimental Agronomica at Santiago de las Vegas, Cuba, the Illinois State Museum at Springfield, the Botany Department of the College of Agriculture at Davis, California, the Muséum National d'Histoire Naturelle at Paris, the Melbourne Botanic Garden at South Yarra, the British Museum (Natural History) at London, and the New York Botanical Garden, and from the Rijksherbarium at Leiden, the Museum en Herbarium at Utrecht, the Herbarium Bogoriense at Buitenzorg, the Erik Wall herbarium at Stockholm, and the Meissner herbarium at New York. This splendid material has brought to light 98 additional county records, 167 state, province, or department records, and 419 island, country, or colony records which are listed for the first time on the following

pages. Numerous corrections of previous records are also noted here. In my original work an asterisk (*) indicated a species or other taxonomic entity endemic to the island, country, or colony under which it was listed. Additional collections have in many cases revealed the presence of this taxon in other geographic or political areas. Such cases are indicated on the following pages, where, as in other supplements, it is stated that the asterisk is to be deleted from the original entry.

Most of the material in this paper was presented by me, on invitation, at the Sección Botánica of the Congreso Científico Mexicano held in connection with the Fourth Centenary of the University of Mexico at Mexico City in September, 1951. Delay in publication by the Congress of its proceedings has made it desirable to publish the material here.

UNITED STATES OF AMERICA:

New York:

Verbena canadensis (L.) Britton [Suffolk County]

Illinois:

Phyla lanceolata (Michx.) Greene [Cumberland, Fulton, Henry, Macoupin, Massac, McLean, Monroe, Pope, Randolph, Saint Clair, Union, & White Counties]

Verbena bracteata Lag. & Rodr. [Bureau, Iroquois, McLean, Monroe, Morgan, & Randolph Counties]

Verbena canadensis (L.) Britton [Cumberland & Shelby Counties]

x Verbena engelmannii Moldenke [Sangamon County]

Verbena hastata L. [Brown, Clay, Cumberland, Edwards, Henry, Iroquois, LaSalle, Lawrence, Marion, McLean, Montgomery, Moultrie, Pulaski, Saline, Sangamon, White, & Winnebago Counties]

x Verbena illicita Moldenke [Fulton County]

x Verbena moechina Moldenke [Winnebago County]

x Verbena perriana Moldenke [Monroe County]

x Verbena rydbergii Moldenke [DeKalb, Fulton, Sangamon, & Winnebago Counties]

Verbena simplex Lehm. [Boone, Lee, & Sangamon Counties]

Verbena stricta Vent. [Coles, DeWitt, Fulton, Kane, Lawrence, Massac, Montgomery, Moultrie, Pope, Saint Clair, Scott, Shelby, & Stevenson Counties]

Verbena stricta f. roseiflora Benke [LaSalle County]

Verbena urticifolia L. [Clark, Coles, Jackson, LaSalle, Livingston, Macon, Massac, McDonough, Mercer, Morgan, Ogle, Pope, Pulaski, Randolph, & Winnebago Counties]

Verbena urticifolia var. leiocarpa Perry & Fernald [Coles & Moultrie Counties]

Indiana:

Phyla cuneifolia (Torr.) Greene [Porter County]

Verbena canadensis (L.) Britton [Blackford & Delaware Counties]

Verbena urticifolia var. leiocarpa Perry & Fernald [Fountain County]

Arkansas:

- Phyla lanceolata (Michx.) Greene [Sharp County]
Verbena bracteata Lag. & Rodr. [Desha & Lawrence Counties]
Verbena canadensis (L.) Britton [Fulton County]
x Verbena moechina Moldenke [Baxter & Fulton Counties]
Verbena simplex Lehm. [Marion & Sharp Counties]
Verbena stricta Vent. [Lawrence & Sharp Counties]
Verbena urticifolia L. [Craighead & Sharp Counties]

California:

- Phyla nodiflora (L.) Greene [San Diego County]
Phyla nodiflora var. canescens (H.B.K.) Moldenke [Alameda County]

MEXICO:

- Lantana camara f. parvifolia Moldenke -- delete the asterisk
Phyla incisa Small [Durango]
Phyla nodiflora (L.) Greene [Campeche, Nayarit, & Sonora]
Phyla nodiflora var. canescens (H.B.K.) Moldenke [Durango & Sonora]
Phyla nodiflora var. reptans (H.B.K.) Moldenke [Puebla & Querétaro]
Phyla strigulosa var. parvifolia (Moldenke) Moldenke [Puebla, Sonora, Veracruz, & Yucatán]

HONDURAS:

- Phyla nodiflora var. longifolia Moldenke [Cortés]
Phyla strigulosa (Mart. & Gal.) Moldenke [Atlántida & Santa Bárbara]

EL SALVADOR:

- Phyla strigulosa (Mart. & Gal.) Moldenke [San Miguel]

NICARAGUA:

- Phyla betulaefolia (H.B.K.) Greene [Grenada]
Phyla nodiflora (L.) Greene [Masaya]

PANAMA:

- Phyla betulaefolia (H.B.K.) Greene [Canal Zone & Colón]
Phyla nodiflora (L.) Greene [Canal Zone]
Phyla nodiflora var. longifolia Moldenke [Canal Zone & Panamá]

CUBA:

- Clerodendrum aculeatum (L.) Schlecht. [Pinar del Río]

GONAVE ISLAND:

- Ghinia subbiflora (Urb. & Ekm.) Moldenke

PUERTO RICO:

- Lantana camara var. mutabilis (Hook.) L. H. Bailey
Lantana camara var. nivea (Vent.) L. H. Bailey is to be deleted

BARBADOS:

- Phyla nodiflora (L.) Greene

SWAN ISLANDS:

- Phyla nodiflora (L.) Greene [Larger Island]

COLOMBIA:

- Lantana canescens H.B.K. [Tolima]

- Paepalanthus barkleyi Moldenke [Cundinamarca]
Paepalanthus lamarckii Kunth [Arauca & Magdalena]
Paepalanthus macarenensis Moldenke [Méta]*
Paepalanthus tatei Moldenke [Méta]
Phyla nodiflora (L.) Greene [Atlántico]
Phyla nodiflora var. reptans (H.B.K.) Greene [Atlántico]
Phyla scaberrima (A. L. Juss.) Moldenke [Atlántico]

VENEZUELA:

- Eriocaulon atabapense Moldenke -- add an asterisk
Eriocaulon tenuifolium Klotzsch [Amazonas]
Paepalanthus lamarckii Kunth [Amazonas]
Paepalanthus tatei Moldenke [Amazonas] -- delete the asterisk
Syngonanthus caulescens (Poir.) Ruhl. [Monagas]
Syngonanthus longipes Gleason [Amazonas]
Syngonanthus oblongus (Körn.) Ruhl. [Amazonas]

BRITISH GUIANA:

- Eriocaulon atabapense Moldenke is to be deleted

ECUADOR:

- Phyla betulaefolia (H.B.K.) Greene [Guayas]
Phyla strigulosa (Mart. & Gal.) Moldenke [Manabi]

GALAPAGOS ISLANDS:

- Phyla strigulosa (Mart. & Gal.) Moldenke [Charles & Chatham]

PERU:

- Aloysia scorodoniooides (H.B.K.) Cham. [Ayacucho]
Citharexylum andinum Moldenke [Cajamarca]
Lantana glutinosa Poepp. [Huancavelica]
Lantana reptans Hayek [Ayacucho]

BRAZIL:

- Aegiphila integrifolia (Jacq.) Jacks. [Rio Branco]
Duranta vestita var. glabrescens Moldenke [Rio Grande do Sul]
Eriocaulon neglectum Ruhl. [Rio Branco]
Ghinia spicata (Aubl.) Moldenke [Ceará]
Lantana brasiliensis Link [Santa Catharina]
Lantana camara var. angustifolia Moldenke
Lantana camara var. mutabilis (Hook.) L. H. Bailey [Espírito Santo & Rio de Janeiro]
Lantana glutinosa Poepp. [Santa Catharina]
Lantana minasensis Moldenke -- delete Espírito Santo and Rio de Janeiro]
Lantana montevidensis (Spreng.) Briq. [Santa Catharina]
Lantana reineckii Briq. [Santa Catharina]
Lippia schomburgkiana Schau. [Rio Branco]
Paepalanthus fasciculatus (Rottb.) Körn. [Rio Branco]
Paepalanthus fasciculatus f. tenellus Herzog [Pará]
Paepalanthus lamarckii Kunth [Ceará]
Paepalanthus pauperrimus Herzog [Rio Branco]
Paepalanthus planifolius var. conduplicatus Ruhl. is the correct orthography

- Paepalanthus plumosus (Bong.) Körn. [São Paulo]
Philodice hoffmannseggii Mart. [Rio Branco]
Stachytarpheta maximiliani Schau. [Rio Grande do Sul]
Syngonanthus bisumbellatus (Steud.) Ruhl. [Goyaz]
Syngonanthus caulescens (Poir.) Ruhl. [Rio Branco & Santa Catharina]
Syngonanthus densiflorus (Körn.) Ruhl. [Maranhão]
Syngonanthus gracilis (Körn.) Ruhl. [Rio Branco & Santa Catharina]
Syngonanthus gracilis var. amazonicus Ruhl. [Rio Branco]
Syngonanthus gracilis var. hirtellus (Steud.) Ruhl. [Pará]
Syngonanthus gracilis var. olivaceus Ruhl. [Amazonas]
Syngonanthus macrocaulon Ruhl. [Amapá]
Syngonanthus simplex (Miq.) Ruhl. [Rio Branco]
Syngonanthus umbellatus (Lam.) Ruhl. [Rio Branco]
Timotocia rosularis (Sandw.) Moldenke [Goyaz]
Verbena hasslerana Briq. [Rio Grande do Sul]
Verbena hirta Spreng. [Rio Grande do Sul]
x Verbena intercedens Briq. [Rio Grande do Sul]
Verbena peruviana f. rosea Moldenke [Santa Catharina]
Verbena phlogiflora f. alba Moldenke [Santa Catharina]*
Verbena strigosa Cham. [Santa Catharina]
Verbena thymoides Cham. [Santa Catharina]
Vitex megapotamica f. albiflora Moldenke [Santa Catharina]*

BOLIVIA:

Citharexylum andinum Moldenke — delete the asterisk

PARAGUAY:

Aloysia lycioides var. schulzae (Standl.) Moldenke
Phyla strigulosa (Mart. & Gal.) Moldenke

CHILE:

Phyla nodiflora (L.) Greene [Valdivia]
Phyla nodiflora var. canescens (H.B.K.) Moldenke [Arica & Cautín]

ARGENTINA:

Verbena ballsii Moldenke [Salta]
Verbena tenera Spreng. [Catamarca]

FRENCH WEST AFRICA:

Clerodendrum splendens var. gilletti (DeWild. & Durand) Thomas

SENEGAL:

Clerodendrum thyrsoideum Gürke
Premna quadrifolia Schum. & Thonn.

SIERRA LEONE:

Clerodendrum bakeri Gürke is to be deleted
Clerodendrum capitatum var. conglobatum (J. G. Baker) Thomas
Clerodendrum congeste Engl. is to be deleted
Clerodendrum schliebenii Mildbr.
Clerodendrum umbellatum var. congeste (Engl.) Moldenke

LIBERIA:

Eriocaulon nigericum Meikle
Eriocaulon pulchellum Körn.
Mesanthemum prescottianum (Bong.) Körn.

IVORY COAST:

Clerodendrum bakeri Gürke is to be deleted
Clerodendrum schweinfurthii var. bakeri (Gürke) Thomas

GOLD COAST:

Clerodendrum botryodes J. G. Baker
Clerodendrum laxicymosum De Wild.

NORTHERN NIGERIA:

Eriocaulon nigericum Meikle

CAMEROONS:

Clerodendrum splendens var. giletti (De Wild. & Durand) Thomas

FRENCH EQUATORIAL AFRICA:

Clerodendrum chevalieri Moldenke [Ubangi-chari]*

Clerodendrum chevalieri var. subintegrum (A. Chev.) Moldenke
 [Ubangi-chari]*

Clerodendrum cordifolium (Hochst.) A. Rich. [Chad Territory &
 Ubangi-chari]

Clerodendrum ubanghense A. Chev. [Ubangi-chari]*

Clerodendrum umbellatum var. centrale (A. Chev.) Moldenke
 [Ubangi-chari]*

Lippia callensi var. villosa Moldenke [Ubangi-chari]

Vitex chariensis var. latifolia A. Chev. [Ubangi-chari]

BELGIAN CONGO:

Clerodendrum aculeatum (L.) Schlecht.

Clerodendrum baumii Gürke

Clerodendrum bequaerti De Wild. is to be deleted

Clerodendrum bipindense Gürke

Clerodendrum congense Engl. is to be deleted

Clerodendrum dekindtii Gürke

Clerodendrum dubium De Wild. is to be deleted

Clerodendrum fuscum var. attenuatum Moldenke*

Clerodendrum fuscum var. lanceolatum Moldenke*

Clerodendrum inerme (L.) Gaertn.

Clerodendrum speciosissimum Van Geert

Clerodendrum splendens var. puberulentum Moldenke*

Clerodendrum splendens var. pubescens Moldenke*

Clerodendrum tanganyikense var. bequaerti (De Wild.) Moldenke

Clerodendrum tanganyikense var. dubium (De Wild.) Moldenke*

Clerodendrum tanganyikense var. microcalyx Moldenke*

Clerodendrum thomsonae Balf. f.

Clerodendrum triplinerve var. grandiflorum Moldenke*

Clerodendrum umbellatum var. congense (Engl.) Moldenke

Congea velutina Wight

Kalaharia spinescens var. hirsuta Moldenke

Lantana camara f. parvifolia Moldenke

Lippia callensi var. villosa Moldenke -- delete the asterisk

Premna bequaerti Moldenke -- delete the asterisk
Premna congolensis Moldenke*
Premna congolensis var. integrifolia Moldenke*
Premna matadiensis var. parvifolia Moldenke*
Premna quadrifolia var. subglabra Moldenke*
Premna zenkeri Gürke
Stachytarpheta urticaefolia (Salisb.) Sims
x Verbena hybrida Voss
Verbena tenuisepta Briq.

RUANDA & URUNDI:

Clerodendrum rotundifolium Oliv.

Premna bequaerti Moldenke

UGANDA PROTECTORATE:

Clerodendrum discolor (Klotzsch) Vatke

Clerodendrum fuscum Gürke

Clerodendrum grandicalyx E. A. Bruce is to be deleted

Clerodendrum laxicymosum De Wild.

Clerodendrum rotundifolium var. stuhlmanni (Gürke) Thomas

Clerodendrum tanganyikense J. G. Baker

ZANZIBAR PROTECTORATE:

Clerodendrum swynnertonii S. Moore

KENYA:

Premna resinosa (Hochst.) Schau.

ANGOLA:

Clerodendrum discolor var. pluriflorum Gürke [Mossamedes]

NORTHERN RHODESIA:

Clerodendrum tanganyikense var. bequaerti (De Wild.) Moldenke

BRITISH NYASALAND PROTECTORATE:

Clerodendrum discolor var. pluriflorum Gürke

Clerodendrum johnstonii Oliv.

Clerodendrum myricoides var. stolzei Thomas

Clerodendrum quadrangulatum var. reclinans Thomas

Clerodendrum schliebenii Mildbr.

Lippia praecox Mildbr.*

Lippia strobiliformis Moldenke

Vitex epidictyodes Mildbr.

SOUTHWEST AFRICA:

Clerodendrum buchneri Gürke

UNION OF SOUTH AFRICA:

Chascanum hederaceum var. natalense (H. H. W. Pearson) Moldenke [Cape of Good Hope]

Clerodendrum dekindtii var. dinteri Thomas [Transvaal]

Clerodendrum mikanjanum H. Winkler [Transvaal]

Clerodendrum scheffleri var. ellipticum Moldenke is to be deleted

MADAGASCAR:

Clerodendrum loniceroides Moldenke is to be deleted

Eriocaulon alleizettei Moldenke*

Vitex vondrozensis Moldenke*

PAKISTAN:

Caryopteris grata Benth. [Northwestern Provinces]Clerodendrum bracteatum Wall. [East Bengal]

INDIA:

Caryopteris grata Benth. [Sikkim]Clerodendrum indicum (L.) Kuntze [Khasi States]Clerodendrum inerme (L.) Gaertn. [Travancore]Clerodendrum villosum Blume [Mysore]Gmelina asiatica L. [Travancore]Lantana camara var. aculeata (L.) Moldenke [Punjab]Stachytarpheta jamaicensis (L.) Vahl [Madras]Tectona grandis var. glabrifolia Moldenke [Mysore]

BURMA:

Clerodendrum nutans var. penduliflorum (Wall.) Bakh. [Tenasserim]

ANDAMAN ISLANDS:

Vitex diversifolia Kurz [South Andaman]*

CEYLON:

Lantana indica Roxb.Lantana trifolia L. is to be deletedLantana trifolia f. hirsuta Moldenke

CHINA:

Callicarpa aspera Hand.-Mazz. is to be deletedCallicarpa rubella var. hemsleyana Diels [Hunan]Clerodendrum fortunei Hemsl. -- delete the asteriskClerodendrum indicum (L.) Kuntze [Kwangtung]Clerodendrum japonicum (Thunb.) Sweet [Kiangsi]Clerodendrum kaempferi (Jacq.) Sieb. [Fukien]Lantana camara var. aculeata (L.) Moldenke [Kiangsu]Petrea volubilis L. [Kwangtung]Phyla nodiflora (L.) Greene [Fukien]Vitex trifolia var. simplicifolia Cham. [Fukien]

FORMOSA:

Clerodendrum thomsonae Balf. f.

HONGKONG:

Clerodendrum fortunei Hemsl.Clerodendrum fragrans var. pleniflorum Schau.Lantana trifolia L. is to be deletedLantana trifolia f. hirsuta Moldenke

LANTAU ISLAND:

Clerodendrum fortunatum L.

HAINAN ISLAND:

Vitex triplinata (Lour.) Merr.

FRENCH INDO-CHINA:

Clerodendrum caryopteroides Moldenke [Laos]*Clerodendrum kaempferi (Jacq.) Sieb. [Annam]Eriocaulon achiton Körn. [Annam]Eriocaulon alatum H. Lecomte [Annam]

- Eriocaulon echinulatum Mart. [Annam]
Eriocaulon gracile Mart. [Annam]
Eriocaulon luzulaefolium Mart. [Annam]
Eriocaulon soucherei Moldenke [Annam]*
Gmelina tonkinensis Moldenke [Annam]
Teijsmanniodendron coriaceum (C. B. Clarke) Kosterm. [Annam]
Vitex leptobotrys H. Hallier is to be deleted
Vitex pinnata var. alata Moldenke -- delete the asterisk
Vitex tripinnata (Lour.) Merr. [Cambodia]

THAILAND:

- Clerodendrum urticifolium (Roxb.) Wall.
Duranta repens var. alba (Masters) L. H. Bailey

FEDERATED MALAY STATES:

- Avicennia marina (Forsk.) Vierh. [Selangor]
Clerodendrum nutans var. penduliflorum (Wall.) Bakh. -- delete the asterisk
Gmelina elliptica J. E. Sm. [Johore & Perak]
Peronema canescens Jack [Kedah]
Stachytarpheta mutabilis (Jacq.) Vahl [Pahang]
Vitex siamica F. N. Will. [Kedah & Kelantan]

STRAITS SETTLEMENTS:

- Avicennia marina (Forsk.) Vierh. [Singapore]
Vitex pinnata L. [Langkawi]
Vitex siamica F. N. Will. [Langkawi & Rabana]

PHILIPPINE ISLANDS:

- Avicennia marina var. rumphiana (H. Hallier) Bakh. [Negros & Palawan]
Clerodendrum minahassae var. brevitubulosum H. J. Lam [Tawi-tawi]
Gmelina elliptica f. lobata (Gaertn.) Moldenke [Cebu & Mindanao]
Phyla nodiflora (L.) Greene [Mindanao]
Phyla nodiflora var. reptans (H.B.K.) Moldenke [Luzon]
Phyla nodiflora f. spathulata Moldenke [Luzon]
Teijsmanniodendron bogoriense Koord. [Mindoro & Palawan]
Teijsmanniodendron longifolium (Merr.) Merr. is to be deleted
Vitex trifolia var. simplicifolia Cham. [Panay]
Vitex velutina (Koord. & Val.) Koord. [Luzon]

MARIANNA ISLANDS:

- Citharexylum caudatum L. [Guam]

CAROLINE ISLANDS:

- Gmelina elliptica J. E. Sm. [Corol & Koror]
Stachytarpheta urticaefolia (Salisb.) Sims [Yap]

RIOUW ARCHIPELAGO:

- Avicennia alba Blume
Avicennia marina (Forsk.) Vierh.
Avicennia marina var. rumphiana (H. Hallier) Bakh. [Doerian]
Gmelina elliptica J. E. Sm. [Bintan]

Lantana camara var. aculeata (L.) Moldenke [Bintan & Papan]

Phyla nodiflora (L.) Greene [Penjingat]

Stachytarpheta jamaicensis (L.) Vahl [Bintan, Karimon, & Pa-pan]

Stachytarpheta urticaefolia (Salisb.) Sims [Bintan, Boengoe-ran, & Toedjoej]

Vitex pinnata L. [Bakong, Bintan, Karimon, & Riouw]

LINGGA ARCHIPELAGO:

Avicennia marina (Forsk.) Vierh. [Singkep]

Gmelina elliptica J. E. Sm. [Lingga]

Lantana camara var. aculeata (L.) Moldenke [Singkep]

Stachytarpheta jamaicensis (L.) Vahl [Lingga]

Stachytarpheta mutabilis (Jacq.) Vahl [Lingga]

Vitex pinnata L. [Singkep].

SIMALUR ISLAND:

Gmelina elliptica J. E. Sm.

Gmelina elliptica f. lobata (Gaertn.) Moldenke

Phyla nodiflora f. spathulata Moldenke

SUMATRA:

Avicennia alba var. latifolia Moldenke

Avicennia marina var. resinifera (Forst.) Bakh.

Callicarpa vansteenisi Moldenke*

Gmelina elliptica f. lobata (Gaertn.) Moldenke

Lantana camara L.

Lantana camara var. mista (L.) L. H. Bailey

Lantana trifolia L. is to be deleted

Lantana trifolia f. hirsuta Moldenke

Phyla nodiflora var. reptans (H.B.K.) Moldenke

Phyla nodiflora f. spathulata Moldenke

x Stachytarpheta adulterina Urb. & Ekm.

Stachytarpheta australis Moldenke

Stachytarpheta mutabilis (Jacq.) Vahl

Vitex vansteenisi Moldenke*

Vitex velutina (Koord. & Val.) Koord.

MADURA ISLAND:

Avicennia marina (Forsk.) Vierh.

Avicennia officinalis L.

Garrettia cymariooides (Lam & Meeuse) Meeuse is to be deleted

Garrettia siamensis Fletcher

Gmelina elliptica J. E. Sm.

Gmelina elliptica f. lobata (Gaertn.) Moldenke

Lantana camara L.

Lantana camara var. aculeata (L.) Moldenke

Phyla nodiflora f. spathulata Moldenke

Stachytarpheta jamaicensis (L.) Vahl

Stachytarpheta urticaefolia (Salisb.) Sims

Vitex trifolia var. simplicifolia Cham.

MANTAWI ISLANDS:

Lantana trifolia L. is to be deleted

Lantana trifolia f. hirsuta Moldenke [Batu]

Peronema canescens Jack [Batu]

Vitex pinnata L. [Siberut]

KRAKATOA:

Avicennia marina (Forsk.) Vierh.

Lantana camara L.

Lantana camara var. aculeata (L.) Moldenke [Lang]

KARIMANDJAWA ISLANDS:

Vitex pinnata L.

VERLATEN ISLAND:

Lantana camara L.

JAVA:

Clerodendrum fortunatum L.

Clerodendrum trichotomum Thunb.

Garrettia cymaroides (Lam & Meeuse) Meeuse is to be deleted

Garrettia siamensis Fletcher

Gmelina elliptica f. lobata (Gaertn.) Moldenke

Gmelina glandulosa H. Hallier is to be deleted

Gmelina moluccana (Blume) Backer

Lantana achyranthifolia Desf.

Lantana camara var. angustifolia Moldenke

Lantana camara var. mista (L.) L. H. Bailey

Lantana camara var. nivea (Vent.) L. H. Bailey

Lantana tiliaefolia Cham.

Lantana trifolia L. is to be deleted

Lantana trifolia f. albicarpa Moldenke*

Lantana trifolia f. hirsuta Moldenke

Lantana trifolia f. oppositifolia Moldenke

Phyla nodiflora f. spathulata Moldenke

x Stachytarpheta abortiva Dans.

Stachytarpheta cayennensis (L. C. Rich.) Vahl is to be deleted

x Stachytarpheta trimeni Rech.

Stachytarpheta urticaefolia f. albiflora Moldenke

Tectona grandis f. abludens Koord. & Val.*

Vitex pinnata var. alata Moldenke

Vitex velutina (Koord. & Val.) Koord. -- delete the asterisk

KANBANGAN:

Lantana camara L.

Stachytarpheta urticaefolia (Salisb.) Sims

Vitex pinnata L.

ANAMBAS ISLANDS:

Stachytarpheta jamaicensis (L.) Vahl [Siantan]

Vitex pinnata L. [Siantan]

Vitex trifolia var. simplicifolia Cham. [Temaja]

BRITISH NORTH BORNEO:

Stachytarpheta jamaicensis (L.) Vahl

SARAWAK:

Gmelina philippensis Cham.
Gmelina uniflora Staph
Stachytarpheta urticaefolia (Salisb.) Sims

BORNEO:

Avicennia marina (Forsk.) Vierh
Gmelina uniflora Staph -- delete the asterisk
Gmelina uniflora var. villosa Bakh.*
Phyla nodiflora f. spathulata Moldenke
Vitex trifolia var. simplicifolia Cham.

KARIMATA ARCHIPELAGO:

Vitex pinnata L. [Penebangan]

TALAUT ISLANDS:

Avicennia marina var. rumphiana (H. Hallier) Bakh. [Karaka-lang]
Stachytarpheta jamaicensis (L.) Vahl [Karakalang]

CELEBES:

Avicennia alba var. latifolia Moldenke -- delete the asterisk
Gmelina elliptica f. lobata (Gaertn.) Moldenke
Lantana camara L.
Phyla nodiflora f. spathulata Moldenke
Stachytarpheta australis Moldenke
Stachytarpheta jamaicensis (L.) Vahl
Stachytarpheta mutabilis (Jacq.) Vahl
Stachytarpheta urticaefolia (Salisb.) Sims
Teijsmanniodendron longifolium (Merr.) Merr. is to be deleted

MOENA:

Avicennia marina var. rumphiana (H. Hallier) Bakh.

KANGEAN ARCHIPELAGO:

Avicennia marina (Forsk.) Vierh. [Kangean & Paliat]
Garrettia cymaroides (Lam & Meuse) Meuse is to be deleted
Garrettia siamensis Fletcher [Sepandjang]
Gmelina elliptica J. E. Sm. [Kangean]
Gmelina elliptica f. lobata (Gaertn.) Moldenke [Kangean & Saboenting]
Lantana camara L. [Kangean, Paliat, Saboenting, & Saeboes]
Lantana camara var. mista (L.) L. H. Bailey [Paliat]
Phyla nodiflora (L.) Greene [Kangean]
Phyla nodiflora f. spathulata Moldenke [Saeboes, Saoebi, Sasel, & Sepandjang]
Stachytarpheta jamaicensis (L.) Vahl [Mamboerit, Saboenting, Saeboes, Saoebi, & Sasel]

Tectona grandis L. f. [Kangean, Paliat, & Sepandjang]

Vitex pinnata L. [Bangko, Kangean, Paliat, Saboenting, & Se-papan]

LESSER SUNDA ISLANDS:

Avicennia alba Blume [Banka]
Avicennia marina (Forsk.) Vierh. [Bali & Banka]
Avicennia marina var. resinifera (Forst.) Bakh. [Wetar]

- Avicennia officinalis L. [Bali, Banka, & Sumbawa]
Gmelina elliptica J. E. Sm. [Banka & Flores]
Gmelina moluccana (Blume) Backer [Timor]
Lantana camara L. [Bali & Banka]
Lantana camara var. aculeata (L.) Moldenke [Bali, Banka, & Lombok]
Lantana trifolia f. hirsuta Moldenke [Lombok]
Phyla nodiflora (L.) Greene [Soemba]
Phyla nodiflora var. longifolia Moldenke [Timor]
Phyla nodiflora f. spathulata Moldenke [Bali, Flores, & Timor]
Stachytarpheta jamaicensis (L.) Vahl [Banka & Sebesi]
x Stachytarpheta intercedens Dans. [Banka]
Stachytarpheta urticaefolia (Salisb.) Sims [Bali, Banka, & Salajar Islands]
Vitex pinnata L. [Bali, Banka, Billiton, Lombok, Salajar, Soemba, & Sumbawa]
Vitex pinnata f. anomala Moldenke [Banka]*
Vitex trifolia var. simplicifolia Cham. [Banka]

MOLUCCA ISLANDS:

- Avicennia alba Blume [Ceram]
Avicennia eucalyptifolia Zipp. [Tanimber Islands]
Avicennia marina (Forsk.) Vierh. [Santari & Ternate]
Avicennia marina var. resinifera (Forst.) Bakh. [Taliaboe]
Avicennia marina var. rumphiana (H. Hallier) Bakh. [Ternate]
Avicennia officinalis L. [Halmahera & Tanimber Islands]
Gmelina elliptica J. E. Sm. [Ceram]
Gmelina elliptica f. lobata (Gaertn.) Moldenke [Amboina]
Gmelina glandulosa H. Hallier is to be deleted
Gmelina lepidota Scheff. [Ternate]
Gmelina macrophylla Wall. is to be deleted
Gmelina moluccana (Blume) Backer [Tanimber Islands]
Holmskioldia sanguinea Retz.
Lantana camara L. [Mangole & Sanana]
Lantana camara var. aculeata (L.) Moldenke [Ceram]
Lantana trifolia L. is to be deleted
Lantana trifolia f. hirsuta Moldenke [Amboina & Ceram]
Phyla nodiflora f. spathulata Moldenke [Amboina & Ternate]
Stachytarpheta jamaicensis (L.) Vahl [Little Key Islands & Ternate]
Stachytarpheta jamaicensis f. monstrosa (Moldenke) Moldenke [Amboina & Ternate]
Stachytarpheta mutabilis (Jacq.) Vahl [Ternate]
x Stachytarpheta trimeni Rech. [Amboina]
Stachytarpheta urticaefolia (Salisb.) Sims [Buru & Ceram]
Stachytarpheta urticaefolia f. albiflora Moldenke [Amboina]
Vitex trifolia var. simplicifolia Cham. [Mangole]

NEW GUINEA:

- Archboldia ericoides Beer & Lam [Papua]

Avicennia marina (Forsk.) Vierh. [Northeastern New Guinea]
Avicennia marina var. resinifera (Forst.) Bakh. [Dutch New Guinea & Papua]

Avicennia officinalis L. [Papua]

Clerodendrum buchanani (Roxb.) Walp. [Northeastern New Guinea]

Gmelina dalrympleana (F. Muell.) H. J. Lam [Dutch New Guinea]

Gmelina dalrympleana var. schlechteri (H. J. Lam) Moldenke
[Dutch New Guinea, Northeastern New Guinea, & Papua]

Gmelina lepidota Scheff. -- delete the asterisk

Gmelina macrophylla Wall. is to be deleted

Gmelina moluccana (Blume) Backer [Dutch New Guinea]

Gmelina papuana Bakh. is to be deleted

Gmelina schlechteri H. J. Lam is to be deleted

Gmelina sessilis var. papuana (Bakh.) Moldenke [Dutch New Guinea & Papua]*

Gmelina sessilis var. ramiflora Moldenke [Dutch New Guinea & Northeastern New Guinea]*

Phyla nodiflora var. longifolia Moldenke [Dutch New Guinea]

Phyla nodiflora var. reptans (H.B.K.) Moldenke [Dutch New Guinea]

Teijsmanniodendron hollrungii (Warb.) Kosterm. [Northeastern New Guinea & Papua]

Vitex trifolia var. simplicifolia Cham. [Papua]

SAIBAI ISLAND:

Gmelina dalrympleana (F. Muell.) H. J. Lam

AROE ISLANDS:

Gmelina dalrympleana var. schlechteri (H. J. Lam) Moldenke
[Kobrotr & Trangan]

LOUISIANE ARCHIPELAGO:

Avicennia eucalyptifolia Zipp. [Heigh]

HAWAIIAN ISLANDS:

Lantana camara var. albiflora Moldenke is to be deleted

Lantana camara var. nivea (Vent.) L. H. Bailey [Oahu]

Vitex trifolia var. simplicifolia Cham. [Lanai]

BISMARCK ARCHIPELAGO:

Phyla nodiflora var. reptans (H.B.K.) Moldenke [New Ireland]

SOLOMON ISLANDS:

Gmelina salomonensis f. glabrescens Moldenke [Bougainville]*

FIJI ISLANDS:

Clerodendrum inerme (L.) Gaertn. [Fulanga, Kandavu, & Koro]

Clerodendrum thomsonae Balf. f. [Viti Levu]

UNION ISLANDS:

Petraeovitex multiflora (J. E. Sm.) Merr. [Duke of York]

SAMOAN ISLANDS:

Stachytarpheta urticaefolia (Salisb.) Sims [Upolu]

AUSTRALIA:

Gmelina sessilis White & Francis is to be deleted

Phyla nodiflora var. longifolia Moldenke [Queensland]

Stachytarpheta jamaicensis (L.) Vahl

CULTIVATED:

- Clerodendrum angolense Gürke [Belgian Congo]
Clerodendrum bakeri Gürke is to be deleted
Clerodendrum buchanani var. fallax (Lindl.) Bakh. [Colombia,
 El Salvador, Hawaiian Islands, Java, Marquesas Islands,
 Puerto Rico, & Samoan Islands]
Clerodendrum buruanum Miq. [Java]
Clerodendrum capitatum (Willd.) Schum. & Thonn. [Java]
Clerodendrum capitatum var. conglobatum (J. G. Baker) Thomas
 [Java]
Clerodendrum colebrokianum Walp. is the correct orthography;
 add Java
Clerodendrum cunninghamii Benth. [Java]
Clerodendrum fragrans (Vent.) R. Br. [Java]
Clerodendrum grandifolium Gürke [Belgian Congo]
Clerodendrum hastatum (Roxb.) Wall. is the correct orthogra-
 phy; add Java & Sweden
Clerodendrum indicum (L.) Kuntze [Java]
Clerodendrum kaempferi (Jacq.) Sieb. [Java]
Clerodendrum laevifolium Blume [Java & Straits Settlements]
Clerodendrum longiflorum var. pubescens Moldenke [Java]
Clerodendrum myrmecophila Ridl. is to be deleted
Clerodendrum nutans Wall. [Ternate]
Clerodendrum paniculatum L. [Java]
Clerodendrum phyllomega var. myrmecophilum (Ridl.) Moldenke
 [England]
Clerodendrum rotundifolium Oliv. [Singapore]
Clerodendrum sahelangii Koord. [Java]
Clerodendrum schweinfurthii var. bakeri (Gürke) Thomas [Eng-
 land & Sierra Leone]
Clerodendrum serratum var. dentatum H. J. Lam [India]
Clerodendrum serratum var. wallichii C. B. Clarke is to be
 deleted
Clerodendrum speciosissimum Van Geert -- delete Colombia, El
 Salvador, Guadeloupe, Hawaiian Islands, Marquesas Islands,
 Martinique, & Samoan Islands
Clerodendrum speciosissimum f. album Moldenke [Java]
Clerodendrum thomsonae var. variegatum Hort. [Java]
Clerodendrum trichotomum Thunb. [Belgian Congo]
Clerodendrum ugandense Prain [Java]
Clerodendrum umbellatum var. speciosum (Dombrain) Moldenke
 [Java]
Clerodendrum viscosum Vent. [Java]
Cornutia grandifolia var. intermedia Moldenke [California]
Eriocaulon kunthii Körn. [Brazil]
Eriocaulon sellowianum Kunth [Brazil]
Faradaya albertisii F. Muell. [Java]
Faradaya dimorpha Pulle [Australia & Puerto Rico]
Faradaya neo-ebudica Guillaum. [Java]

- Faradaya papuana Scheff. [India & Java]
Gmelina arborea var. canescens Haines [Java]
Gmelina asiatica L. [India]
Gmelina elliptica J. E. Sm. [Belgian Congo]
Gmelina elliptica f. lobata (Gaertn.) Moldenke [Java]
Kalaharia spinescens (Oliv.) Gürke [Belgian Congo]
Lantana arubensis Moldenke [Java & Uruguay]
Lantana camara L. [Banka]
Lantana camara var. angustifolia Moldenke [Banka, Brazil, India, & Java]
Lantana camara var. flava (Medic.) Moldenke [Java]
Lantana camara var. mista (L.) L. H. Bailey [Java]
Lantana camara var. nivea (Vent.) L. H. Bailey [Java]
Lantana indica Roxb. [India]
Lantana leprieuri Moldenke [Senegal]*
Lantana montevidensis (Spreng.) Briq. [Java]
Lantana moritziana Otto & Dietr. [Java]
Lantana tiliaefolia Cham. [India & Java]
Lantana trifolia L. -- delete India
Lantana trifolia f. hirsuta Moldenke [India & Java]
Lippia alba (Mill.) N. E. Br. [India]
Paepalanthus planifolius (Bong.) Körn. [Brazil]
Phyla nodiflora (L.) Greene [India & Java]
Premna matadiensis var. parvifolia Moldenke [Java]
Stachytarpheta australis Moldenke [Java]
x Stachytarpheta debilis Dans. [Java]
x Stachytarpheta intercedens Dans. [Java]
Stachytarpheta urticaefolia (Salisb.) Sims [Belgian Congo, Ceram, & French Indo-china]
Stachytarpheta urticaefolia f. albiflora Moldenke [Java]
Tectona hamiltoniana Wall. [Java]
Verbena tenuisecta Briq. [Illinois]
Vitex agnus-castus f. latifolia (Mill.) Rehd. [Uruguay]
Vitex leucoxylon L. f. [Java]
Vitex lucens T. Kirk [New Zealand]
Vitex negundo L. [Java]
Vitex negundo var. intermedia (P'ei) Moldenke [Uruguay]
Vitex trifolia L. [Cuba & Sumatra]
Vitex trifolia var. heterophylla (Mak.) Moldenke [Java & Sumatra]
Vitex trifolia var. simplicifolia Cham. [Java]

FOSSILIZED:

- Holmskioldia speirii (Lesq.) MacGinitie [Miocene of Colorado]*
Petrea perplexans (Cockerell) MacGinitie [Miocene of Colorado]*

- (1) Moldenke, H. N., The known geographic distribution of the members of the Verbenaceae, Avicenniaceae, Stilbaceae, Sympodemataceae, and Eriocaulaceae. 215 pp. 1949.
- (2) — do. —. Supplement 1, in Phytologia 3: 283—296. 1950.
 — do. —. Supplement 2, in Revista Sudamericana de Botanica 8: 165—174. 1950.
 — do. —. Supplement 3, in Phytologia 3: 304—307. 1950.
 — do. —. Supplement 4, in Phytologia 3: 374—382. 1950.
 — do. —. Supplement 5, in Phytologia 3: 448—468. 1951.
 — do. —. Supplement 7, in Phytologia 3: 484—490. 1951.
 — do. —. Supplement 8, in Phytologia 4: 65—88. 1952.
 — do. —. Supplement 9, in Phytologia 4: 119—124. 1952.
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ADDITIONAL NOTES ON THE ERIOCAULACEAE. IX

Harold N. Moldenke

PAEPALANTHUS BRITTONI Moldenke

Brother León has collected this species on iron ore along river shores in hilly country.

Additional citations: CUBA: Oriente: Mrs. G. C. Bucher 81 (N); León 20149 (N).

PAEPALANTHUS CALDENSIS Malme

An additional synonym is Paepalanthus ruhlandii Alv. Silv.

Additional citations: BRAZIL: Paraná: Hatschbach 1555 (N); Jönsson 123a [Macbride photos 25165] (Kr—photo, N, N—photo); Stellfeld 1064 [Herb. Mus. Parana. 2044] (N); Tessmann 3071 [Herb. Mus. Parana. 3071] (N), 3784 [Herb. Mus. Parana. 3784] (N). Rio Grande do Sul: Rambo 30965 (N, N). Santa Catharina: Reitz 2695 (N).

PAEPALANTHUS PETRAEUS Körn.

The Killip 34118 cited by me in Phytologia 4: 152 (1952) as this species proves to be P. planifolius var. alpestris instead.

PAEPALANTHUS PILOSUS (H.B.K.) Kunth

Additional citations: COLOMBIA: Antioquia: F. A. Barkley 18A1146 (N), 18A1148 (N); Valderrama V. & Barkley 18A164 (N). Cundinamarca: Cuatrecasas 401 (W—1772816), 9644 (W—1795905); Hol-